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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/032,686	10/23/2001	Ken-Ming Li	372582-00201	7296
37509	7590	03/09/2006	EXAMINER	
DECHERT LLP P.O. BOX 10004 PALO ALTO, CA 94303			LOKE, STEVEN HO YIN	
			ART UNIT	PAPER NUMBER
			2811	

DATE MAILED: 03/09/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/032,686	LI ET AL.	
	Examiner	Art Unit	
	Steven Loke	2811	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 25 February 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-56 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-56 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

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1. Claims 1-56 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

The specification never discloses the I/O pad occupies less than its allocated pad area and a strip of deposited conductor located in an unoccupied part of its allocated pad area as claimed in claim 1.

The specification never discloses the I/O pad of a second type occupying an area smaller than its allocated pad area as claimed in claim 10.

The specification never discloses the data I/O pad occupies less than its allocated pad area and a strip of deposited conductor located in an unoccupied part of its allocated pad area as claimed in claim 22.

The specification never discloses the multi-level voltage I/O pad occupies less than its allocated pad area and a strip of deposited conductor located in an unoccupied part of its allocated pad area as claimed in claim 28.

The specification never discloses the data or multi-level voltage I/O pad occupies less than its allocated pad area and a strip of deposited conductor located in an unoccupied part of its allocated pad area as claimed in claim 34.

The specification never discloses each I/O pad is configured to occupy less than the pad area allocated for it and a plurality of conductive strips each being formed in a designated one of the unoccupied pad areas as claimed in claim 53.

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2. Claims 1-52 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 1, lines 3-4, the phrase "each of the power supply I/O and I/O pads" is unclear whether it is being referred to "each of the power supply I/O pad and the I/O pad of a first type".

Claim 1, lines 4-5, the phrase "the power supply I/O pad occupies its allocated pad area" is vague and indefinite. Is the power supply I/O pad occupies an allocated pad area?

Claim 14, line 1, the phrase "the other strip" is unclear whether it is being referred to the strip in claim 10.

Claim 22, lines 5-6, the phrase "the power supply I/O pad occupies its allocated pad area" is vague and indefinite. Is the power supply I/O pad occupies an allocated pad area?

Claim 28, lines 5-6, the phrase "the power supply I/O pad occupies its allocated pad area" is vague and indefinite. Is the power supply I/O pad occupies an allocated pad area?

Claim 34, lines 8-9, the phrase "each of the positive and negative power supply I/O pads occupies its allocated pad area" is vague and indefinite. Is each of the positive and negative power supply I/O pads occupies an allocated pad area?

Claim 38, line 3, the phrase "a first and second layer" is unclear whether it is being referred to "a first layer and a second layer".

Claim 39, lines 1-2, the phrase "the first and second layers are the same layer" is unclear as to how the first and second layers are the same layer.

Claim 43, line 2, the phrase "a fifth and sixth layer" is unclear whether it is being referred to "a fifth layer and a sixth layer".

Since the positive power bus exists at the second lowest layer, it is unclear why claim 46 discloses the positive power bus exists at the third lowest layer.

Since the positive power bus exists at the second lowest layer, it is unclear why claim 48 discloses the positive power bus exists at the fourth lowest layer.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Steven Loke whose telephone number is (571) 272-1657. The examiner can normally be reached on 8:00 am to 5:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Eddie Lee can be reached on (571) 272-1732. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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March 6, 2006

Steven Loke
Primary Examiner

A handwritten signature in cursive script that reads "Steven Loke".